A NEW BOTANICAL RESEARCH LABORATORY IN THE TROPICS.

In the year 1901 I paid a visit to the colony of Surinam (Dutch Guiana), and as a result of this voyage a scientific laboratory will be opened this year in Paramaribo. A botanist and a chemist will be connected with this laboratory, one of them with the title "agricultural inspector for the Dutch West-Indian colonies." I wish to draw the attention of American botanists to this laboratory, because it will contain a room, 9 by 4.5 meters, where foreign naturalists will have the opportunity for research work.

It is needless to argue here on the advantages of a botanical research laboratory in the tropics; the experience of the botanical garden at Buitenzorg speaks for itself. But for many scientific men in the States Buitenzorg is too far away, and on the other hand there are several problems which can be studied only in tropical America.

For this reason I should like to give here a few more particulars about this laboratory. It will be built in the small experiment garden now existing, which is in great part uncultivated, with an interesting secondary forest. In the vicinity may be found tidal and swamp forests. The large rivers of Surinam are the means of communication with the interior; there is a service of regular steamers on some of them. In the neighborhood of the coast are the European cacao and sugar estates. Bordering the rear of these estates are primeval forests, which cover a great area of the colony; they are perhaps more luxuriant than any in the world. Moreover, the botanist will find large and interesting savannas, and he who can go farther into the interior (the easiest way will be to visit some of the gold fields) may gather many Podostemaceae in the rapids of the upper part of the rivers. Epiphytes (among these especially Bromeliaceae, Orchidaceae, Cactaceae, Ficus), lianes, cauliflorous trees, myrmecophilous trees, Loranthaceae and other parasites—in one word, all the many ecological characteristics of the tropics with their damp climate—may be seen in their highest degree of development here.

Though malarial fever may occur in the interior of Surinam, Paramaribo is almost free from it, and generally speaking it is a healthy town. Yellow fever is almost extinct; since 1867 there has been only one small epidemic, in 1902. From my own experience I feel quite certain that naturalists will be kindly received by the inhabitants and will get a great deal of help from private persons as well as from officials.

Hotels in Paramaribo cannot be said to be very good, though they are not expensive; the average price per day is fl. 5 (\$2). In the interior there do not exist hotels or boarding-houses; whoever cannot be the guest of a planter or other European living in the interior will have to carry with him a hammock, tinned food, and other necessities. If we estimate for traveling and other smaller expenses \$200, for clothing \$100-\$150, a four-months stay would cost about \$540-\$600 plus the steamship fares. There are several direct lines from the United States to Barbados, whence every fortnight a steamer of the Royal Mail Steampacket Company sails for Demerara and Paramaribo in about four or five days. The Dutch mail steamers of the Koninklijke West-Indische Maildienst (Royal Dutch West-Indian Mail Service) sail twice a month from New York via Port-au-Prince, Aux Cayes, Jacmel, Curação, Puerto Cabello, La Guayra, Guanta, Cumaná, Carupano, Trinidad, and Demerara to Paramaribo, whence they proceed to Amsterdam. A first-class ticket from New York to Paramaribo costs \$100; a return ticket, available for a year, \$170. But the company is willing to give a reduction of 15 per cent. on this tariff to every naturalist who goes to Surinam with the aim of studying in the laboratory in Paramaribo. In order to get this reduction one has to make an application (with documents to prove this intention) to the agents of the company at New York (Kunhardt & Co.).

The average temperature at Paramaribo is 27° C. (max. 30–33°, min. 20–22° C.). The big rainy season lasts from the middle of April to the end of February; the dry seasons very often are not so very dry; the total amount of the rainfall is about 2,500 mm yearly. The flowering times are about August, September, October, and from January till April. Whoever intends to make a stay in the new laboratory will have to apply to the agricultural inspector in Paramaribo, whose appointment will be made shortly and will be announced in the botanical journals; moreover, I am willing to give any further information.—F. A. F. C. Went, University of Utrecht, Holland.

NEW OR LITTLE-KNOWN WOODY PLANTS.

Crataegus hystricina, n. sp.—A small irregular shrub 9–15 dm high, with several stems from the same root. Bark on the slender stems rough, dark gray, that on the branches smooth and lighter. Twigs stout, red-brown, glabrous, armed with brown-purple thorns 4–6 cm long. Leaves ovate or suborbicular, abruptly acute at apex, rounded or acute